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UTILITY PATENT APPLICATION TRANSMITTAL Under Small Entity Status (New Nonprovisional Applications Under 37 CFR § 1.53(b))	Attorney Docket No. 110/103

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Transmitted herewith is the patent application of ( ) application identifier or (X) first named inventor, Tyson Winarski, Esq., entitled An Internet Based System for Managing a Network of Electronic Advertising Billboards through a Wireless Telecommunications System, for a(n):

(X) Original Patent Application.

( ) Continuing Application (prior application not abandoned):
- ( ) Continuation ( ) Divisional ( ) Continuation-in-part (CIP) of prior application No: _____ Filed on: _____.
- ( ) A statement claiming priority under 35 USC § 120 has been added to the specification.

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Multiple Dependent Claims (if applicable)				$0.00
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Respectfully submitted,

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Docket Number (Optional) **110/103**

Applicant, Patentee, or Identifier: Tyson Winarski, Esq., et al.

Application or Patent No.: _____

Filed or Issued: _____

Title: An Internet Based System for Managing a Network of Electronic Advertising Billboards through a Wireless Telecommunications System

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Tyson Winarski, Esq.	Jeff Myers
NAME OF INVENTOR	NAME OF INVENTOR
Signature of Inventor	Signature of Inventor
Sept 15, 2000	Sept. 15, 2000
Date	Date

APPLICATION FOR UNITED STATES LETTERS PATENT

An Internet Based System for Managing a Network of Electronic Advertising Billboards through a Wireless Telecommunications System

By

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Field of the Invention

The present invention generally relates to the field of management systems supported by a global computer network. More specifically, the present invention relates to a computer system that manages a network of electronic advertising billboards through a wireless telecommunications system.

Background

Technology is having a massive impact upon our economy. The global computer network known as the World Wide Web has facilitated a business revolution and propelled the world into an Information Age. All sectors of the economy are seeking to improve their efficiency and productivity by incorporating the benefits brought by advancing technology.

The billboard advertising industry is one sector of the economy that could greatly benefit from the benefits of advancing technology and the World Wide Web. At present, the most dominant technology used for billboard advertising is the well-known highway and street side billboard. These billboards are comprised of a metal or wooden frame that supports a large image advertising a business, product, event, political message, or team sport. However, with then invention of large flat screen displays, billboard advertising has moved into the electronics age. Through the use of large flat screen displays such as the Jumbotron produced by the Sony Corporation, the billboard advertising industry can now project a commercial to viewers instead of a mere still image. In addition to these large flat screen television displays, various other large electronic displays that can project clear advertising images are now currently in use.

At present, the use of these large flat screen displays is not very common. Heavily traveled locations in the largest of cities like New York's Times Square have large flat screen displays. Several professional sports facilities have large flat screen displays such as Bank One Ballpark, home of the Arizona Diamondbacks. These large flat screen displays are used for advertising.

With the advance of technology and manufacturing capacity, it is anticipated that these large flat screen displays with increase in number. In fact, with time, large flat screen displays may replace the printed still image billboards now seen by the highway and in the cities. This future network of electronic billboard displays will require a computer-based network to manage them.

Summary of the Invention

The object of the present invention is a computer-based system that manages a network of electronic billboards through a wireless telecommunications system. This electronic billboard management system is comprised of a web-site supported by a global computer network. This web-site communicates with the network of electronic billboards through a variety of methods. The primary method of communication is a wireless telecommunications link. The web-site accesses a communications server that dials out to a communications antenna or satellite link. This antenna or satellite then transmits information from the web-site to the wireless receiver connected to the electronic billboard. Alternatively, billboards may include a direct telephone line for communication with the web-site.

To buy advertising space on this network of electronic billboards, a purchaser will access the web-site supported by the global computer network via an Internet service provider (ISP). Once the purchaser has accessed the web-site, the purchaser will first encounter the web-site login system. If the purchaser is a first time purchaser, he will have to go through a registration system. The purchaser will have to provide their personal name, company name, billing address, e-mail address contact information, and other general information. Once the purchaser has registered, the web-site registrations system will provide him with a login name and password. If the purchaser has already registered, they will simply provide their login name and password to the login system.

Once the purchaser has logged in, he or she has access to the Purchase Advertising System, Upload Advertising System, the Account Support System, and the Advertising Design System. To buy advertising on one or more of the electronic billboards, the purchaser will access the Purchase Advertising System. The Purchase Advertising System includes a series of maps that show the locations of the electronic billboards throughout the nation and the world. These maps are layered in order of detail. The first level map shows the entire world. A purchaser will then select a country in which they wish to advertise. From there the purchaser can select state, county, and city maps to determine the location of available billboards. In addition, these maps include the ability to access a digital image of the actual billboard and its surrounding vicinity.

A purchaser would now access the availability screen. This availability screen lists the locations and times of electronic billboard space that is still available for purchase.

To actually buy advertising space on these electronic billboards, a purchaser will access a purchase advertising order form within the Purchase Advertising System. On this order form, a purchaser can select the number of electronic billboards and the geographic area in which he wishes to advertise. In addition, the purchaser can select the time at which he wishes to advertise. For instance, a purchase could buy space on all of the electronic billboards in an entire city for five minutes at the same time. The web-site will determine the cost for renting the space requested by the purchaser. The purchaser would then enter credit card information to pay for the rented advertising space. Once the purchaser has paid for the rented space, the web-site will give him an access code to for use with the Upload Advertising System to upload the actual advertisement to the computer system.

A purchaser can create an advertisement through two methods. He or she can either create an advertisement using his or her own resources. Or, he or she can access the Advertising Design System. The Advertising Design System is a graphics art computer program that can create a variety of still or animated images. A purchaser who lacks the software to create their own advertising can thereby use the software supported by the web-site to create and advertisement.

Once a purchaser has created an advertisement, he will then access the Upload Advertising System. The purchaser will provide the Upload Advertising System with the code created by the Purchase Advertising System. This code enables the Upload Advertising System to access the purchaser's account and determine which billboards are to carry the advertisement at what times. The Upload Advertising System then accesses a communications server that dials out to a communications antenna or satellite link. This

antenna or satellite then transmits digital advertisement from the web-site to the wireless receiver connected to the electronic billboard. Alternatively, billboards may include a direct telephone line for communication with the web-site.

The primary object of the invention is to create a computer supported method and system that can manage a plurality of electronic billboards. A further object of the invention is to produce a system whereby purchasers of billboard advertising can buy advertising space on electronic billboards via the Internet. A still further object of the invention is to enable the Internet based billboard management system to communicate with the network of electronic billboards through a wireless communications system.

In one embodiment, the invention is implemented to provide a method for operating a computer supported method and system that can manage a plurality of electronic billboards. In another embodiment, the invention is implemented to provide an apparatus for operating a computer supported method and system that can manage a plurality of electronic billboards. In still another embodiment, the invention is implemented to provide a signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a data processing apparatus for operating a computer supported method and system that can manage a plurality of electronic billboards. Finally, another embodiment consists of logic circuitry having a plurality of interconnected, electrically or optically conductive elements configured for operating a computer supported method and system that can manage a plurality of electronic billboards.

Further objects and advantages of the invention will become apparent as the following description proceeds and the features of novelty which characterize this

invention are pointed out with particularity in the claims annexed to and forming a part of this specification.

Brief Description of the Drawings

The novel features that are considered characteristic of the invention are set forth with particularity in the appended claims. The invention itself; however, both as to its structure and operation together with the additional objects and advantages thereof are best understood through the following description of the preferred embodiment of the present invention when read in conjunction with the accompanying drawings wherein:

Figure 1 shows a diagram of the overall system for managing a network of electronic billboards;

Figure 2 shows a diagram of the wireless system of a single electronic billboard;

Figure 3 shows a block diagram of the systems comprising the management system supported by a web-site on a global computer network;

Figure 4 shows the process of logging in and registering as a user;

Figure 5 shows the process for searching for available advertising space;

Figure 6 shows the process for buying an advertisement;

Figure 7 shows the process for creating an advertisement;

Figure 8 shows the process for uploading an advertisement and distributing it to the network of electronic billboards;

Figure 9 shows a user/registration database;

Figure 10 shows an electronic billboard database;

Figure 11 shows an information bearing cartridge;

Figure 12 shows an information bearing storage medium for the microcode used in processing the activity of the electronic billboard management system; and

Figure 13 shows an information bearing semiconductor chip.

Description of the Preferred Embodiments

A diagram of the overall system for managing a network of electronic billboards is shown in Figure 1. A plurality of personal home computers **110** are connected to a global computer network **115** such as an Internet. This global computer network **115** is connected to a local Ethernet **124**. The Ethernet **124** is managed by a system administration computer **123**. A database server **120**, a web server **121**, and a communications server **122** are connected to the Ethernet **124**. The database server **120** stores the user/registration database **900** shown in Figure 9. The database server **120** also stores the billboard database **10000** shown in Figure 10. The web server **121** supports the web site **300**, shown in Figure 3, that is accessible from the global computer network **115**.

The communications server **122** connects the Ethernet **124** to a satellite dish **126** or a radio antenna **127** through a communications system **125** in order to wirelessly communicate with one or more electronic billboard systems **130** located within a geographic region such as the State of Arizona. In the event a satellite dish **126** is used, data bearing signals **129** are transmitted from the satellite dish **126** to a satellite **128** and relayed to one or more of the electronic billboard systems **130**. The communications server **122** can also elect to transmit data bearing signals **129** through a radio tower **127** to

one or more of the electronic billboard systems **130**. The signals **129** can be either analog or digital signals.

In order to access the web site **300**, a user will first log on to one of the personal computers **110**. The user will then access the global computer network **115** from her personal computer **110**. Once the user has accesses the global computer network **115**, the user will direct her computer to access the web site **300** supported by the web server **121**. Once the user is in communication with the web site **300** whose architecture is shown by the chart **300**, the user can conduct electronic billboard commerce.

Figure 2 shows a diagram of the wireless system of a single electronic billboard. Visual output of the advertisement is seen on display **201**. Display **201** could preferably be a gas-discharge display, which is commonly known as a plasma display. A gas-discharge display contains neon between a horizontal and vertical set of electrodes. When a vertical and a horizontal electrode are charged, the neon glows at their intersection, emitting light. Display **201** may equally be a cathode ray tube (CRT) commonly used with desktop computers, a liquid crystal display, light emitting diode display, or a flat panel electroluminescent display.

Display **201** may be a liquid crystal display (LCD) commonly used in laptops, cell-phones, fax machines, etc. An LCD display uses organic fluids called liquid crystals, because liquid crystals possess two important properties. First, liquid crystals are transparent but can alter the orientation of polarized light passing through them. Second, the alignment of liquid crystal molecules and their polarization properties can be changed by applying an electric field. Liquid crystals are sandwiched between two glass plates, the outsides of which having been coated with polarizing filters and the inner plate is

typically backlit via fluorescent light. Inside these glass plates is a matrix of electrodes. When an element of the matrix, called a pixel, experiences a voltage change, the polarization of the adjacent liquid crystal molecules change, which alters the light transmitted through the LCD pixel and hence seen by the user.

Display **201** could equally use light emitting diodes (LEDs) which are a semiconductor device that converts electrical energy into light. LEDs work on the principle of electroluminescence and are produce little heat for an amount of light output. Display **201** could be a flat panel electroluminescent display, where a thin phosphor layer is set between vertical and horizontal electrodes. These electrodes form an X-Y Cartesian coordinate system. When a vertical and a horizontal electrode are charged, the phosphor at their intersection emits light.

The display **201** is connected to a local computer **202** that is in communication with an antenna **203**. The antenna **203** receives signals **129** transmitted from either the satellite **128** or the radio tower **127**. The local computer **202** supports the communications software that acquires and stores the signals **129** received by the antenna **203**. The local computer **202** also supports the software that operates the display **201**.

Figure 3 shows architecture menu **300**. Architecture menu **300** comprises login system **302**. If a prospective user is not yet registered, there is registration system **304**. Once the user is registered, the user has access to purchase system **310**, upload system **312**, create ad system **314**, and account system **316**. In the event that a purchaser has not already produced an advertisement to show on a display **201**, the purchaser can create an advertisement using the create ad system **314**. The create ad system **314** is comprised of a photo-paint software system that produces animated and still drawings. The purchaser

can access the account system **316** to examine the financial activity on their account. The purchaser can view how many billboards she has purchased and at what price. The purchaser can also update their contact information such as phone, fax, mailing address, and email address. The purchaser can also update their billing information or credit card information through the account system **316**.

Registration system is further developed in Figure 4. When a user accesses the website, step **400**, step **402** is used to determine whether the user is already registered. If the user is already registered, the process flows to step **404**, which sends the process to step **500** in Figure 5.

However, if the user is not already registered in step **402**, the registration process flows to step **406**, where the user completes an online registration form. The registration process then flows to step **408**, where the input provided by the prospective user is checked. If the input is not valid, due to invalid email address, nonexistent credit card information, etc., step **408** returns to step **406** and the user is again asked to complete the online registration form. However, if the input is verified as valid in step **408**, the registration process flows to step **410** where the system stores the data for future use. Then the registration process flows to step **412**, where the system emails a logon name and password to the user via the email address supplied by the user. Then the registration process ends at step **420**.

In Figure 5, the user enters his or her logon and password in step **502**. In step **504**, the system searches the database of users. From step **504**, the logon process flows to step **506**, where the system checks as to whether the logon and password are valid. If the logon and password are not valid, the logon process flows to step **508**, where the counter

of the number of logon attempts is incremented by one, pwtrial = pwtrial + 1. In step **510**, the counter pwtrial is compared against a threshold number N1. This threshold number could be set by the system administrator. A suitable value for N1 could be three. If the counter does not exceed this threshold number N1 in step **510**, the logon process flows to step **511**, where the user receives an "Invalid logon and password" message. Then, the process goes back to step **502** for another logon attempt.

However, if the counter of the number of logon attempts exceeds threshold N1 in step **510**, the logon process flows to step **512** and the account is frozen for security reasons. This is to prevent hackers from causing harm. The logon process flows to step **514**, where a security alert is issued to the system administrator before the logon process "abnormally ends" or abends in step **516**.

If the user provides a valid logon and password in step **506**, the logon process flows to step **520**, where the counter of the number of logon attempts is reset to zero, pwtrial=0. Then the logon process flows to step **522** where the user is given access to the main menu, which was described in Figure 3. The logon process flows to step **524**, signifying that the logon process is now complete.

Once the logon process is completed, Figure 5, the user may enter the access purchase system process, step **600** of Figure 6. The purchase process flows to step **602**, where the system gives the user a table of available locations, available time periods or slots, and the prices associated with those locations and time periods. The purchase process then flows to step **604**, where the user specified the desired billboard location and time periods. The purchase process then flows to step **606**, where the purchase process searches the database for the availability of the desired billboard location and time

periods. In step **608**, the query is made as to whether the requested location and time is available. If the requested location and time is not available, the purchase process flows to step **606**, where the user is queried if he or she desires to continue with the purchase process. If the user does wish to continue with the purchase process in step **616**, the process flows to step **602**. If the user does not wish to continue with the purchase process in step **616**, the purchase process exits at step **630**.

If in step **608**, the requested location and time is available, the purchase process flows to step **610**, where the purchase process accesses the price database. Then the purchase process flows to step **612**, where the user is asked whether he or she wishes to purchase the available location and time. If the user answers no, the purchase process flows to step **616**. However, if the user does wish to purchase the location and time, the process flows to step **618** and the user then completes an online purchase form. The purchase process then flows to step **620**, where the user is provided with an upload code, for uploading his or her advertisement. Then, the purchase process flows back to step **616**, where the user is queried whether he or she wishes to continue and possibly make additional purchases.

In Figure 7, the user prepares to upload advertising in step **700**. The upload process flows to step **702**, where the user provides the upload code. The upload process flows to step **704**, where the system searches the upload database in an attempt to check the validity of the upload code. If the upload code is correct, the upload process flows to step **720**, where the counter for attempts to enter the upload code is reset to zero, uptrial=0. Then the upload process flows to step **730**, which signifies a jump to step **800** of Figure 8.

If the upload code is not correct in step **706**, the logon process flows to step **708**, where the counter of the number of upload code attempts is incremented by one, uptrial = uptrial + 1. In step **710**, the counter uptrial is compared against a threshold number N2. This threshold number could be set by the system administrator. A suitable value for N2 could be three. If the counter does not exceed this threshold number N2 in step **710**, the logon process flows to step **718**, where the user receives an "Invalid upload code" message. Then, the process goes back to step **702** for another logon attempt.

However, if the counter of the number of upload code attempts exceeds threshold N2 in step **710**, the logon process flows to step **712** and the account is frozen for security reasons. This is to prevent hackers from causing harm. The logon process flows to step **714**, where a security alert is issued to the system administrator before the logon process "abnormally ends" or abends in step **716**.

Figure 8 gives the rest of the upload process, which begins with step **800**, which the user reaches upon correctly entering his or her upload code. The upload process then continues to step **802**, where the system issues a request to the user for the location of the advertisement file for upload. The upload process flows to step **804**, where the user provides the location of the file to be uploaded and the file is uploaded to the system. The upload process then flows to step **806**, where the system performs a check of the advertisement file, to insure it is in the correct format and compatible with the display technology which will display the file. If the advertisement file is not correct in step **806**, the upload process flows to step **808**, where an "Improper Format" message is displayed to the user. Then the upload process flows from step **808** to step **802** where the user can upload a correct advertising file.

If the advertising file is in the correct format in step **806**, the upload process flows to step **810**, where the system accesses the communications server. The upload process then flows to step **812**, where the system transmits the advertisement file to the remote electronic billboard network. Then upload process then flows to step **814**, where the advertisement file is displayed on the electronic billboard at the desired location and desired time. The upload process then flows to step **820**, which is the conclusion of the upload process.

Figure 9 shows a user/registration database **900**. Template **900** includes the contact person's name **901**, mailing address **902**, city **903**, state **904**, country and Zip code **905**, phone number **906**, fax number **907**, email address **908**, and company name **909**, name of contact **910**, username **911**, password **912**, and Internet address **913**. A purchaser seeking to register as a user on the system will provide information for **901, 902, 903, 904, 905, 906, 907, 908, 909, 910,** and **913**. The registration system **304** generates the username **911** and the password **912** and stores them in the table **900**. The registration system emails the username **911** and the password **912** to the purchaser at the email address **908**.

Figure 10 shows an electronic billboard database **1000**. The table **1000** provides a listing of all of the electronic billboard systems **130** in the network by their billboard number **1001**, street address **1010**, city **1011**, state **1012**, and zip code **1013**. The purchase system **310** uses the information **1001, 1010, 1011, 1012,** and **1013** to generate a map showing the locations of billboards **130** available for purchase. Section **1014** provides a table of the times and prices of the billboards **130**. The billboards in this table are shown being for sale in four hour blocks of time at 12am, 4 am, 8 am, 12pm, 4pm,

and 8 pm. An "X" in a time block indicates that the billboard **130** has already been purchased. A number in the time block indicates the price at which that four hour time block for that billboard **130** can be purchased. If the purchaser buys a block of time, the purchase system **314** writes an "X" in the table for every block of time purchased. While this table is shown dividing the available electronic billboard space into four hour blocks of time, any time increment is possible.

Figure 11 shows a typical floppy disk cartridge **1100** which could be used hold the microcode used in processing the activity of the electronic billboard management system. Floppy disk cartridge **1100** consists of cartridge body **1101** and shutter **1102**. Shutter **1102** has an opening **1103**, so that I/O can be performed on the data on disk inside of the cartridge body **1101**. Cartridge body **1101** has an opening **1104** so that the hub **1105** of the floppy disk can be rotated by a floppy disk drive, for the purposes of I/O.

Figure 12 shows a typical floppy disk **1200** which would be contained in floppy disk cartridge **1100**. Floppy disk **1200** has an circular outer perimeter **1201**. Data is recorded in circular or spiral tracks **1203** between the inner recording radius **1204** and the outer recording radius **1202**. Hub **1205** is used to rotate the floppy disk **1200** so that I/O can be performed on the data in tracks **1203**.

Figure 4 shows computer chip **1300**. Computer chip **1300** may be a RAM, EPROM, or ASIC chip, etc. The exterior of chip **1300** shows a typically square or rectangular body **1301** with a plurality of electrical connectors **1302** along the perimeter of body **1301**. There is typically an alignment dot **1303** at one corner of chip **1300** to assist with the proper alignment of chip **1300** on a card. Within body **1301**, chip **1300** consists of a number of interconnected electrical elements, such as transistors, resistors,

and diodes. These interconnected electrical elements are fabricated on a single chip of silicon crystal or other semiconductor material such as gallium arsenide (GaAs) by use of photolithography. One complete layering-sequence in the photolithography process is to deposit a layer of material on the chip, coat it with photoresist, etch away the photoresist where the deposited material is not desired, remove the undesirable deposited material which is no longer protected by the photoresist, and then remove the photoresist where the deposited material is desired. By many such photolithography layering-sequences, very-large-scale integration (VLSI) can result in tens of thousands of electrical elements on a single chip. Ultra-large-scale integration (ULSI) can result in a hundred thousand electrical elements on a single chip.

While the invention has been shown and described with reference to a particular embodiment thereof, it will be understood to those skilled in the art, that various changes in form and details may be made therein without departing from the spirit and scope of the invention.

I claim:

1. An apparatus for a wireless electronic billboard commerce system comprised of:

an electronic billboard comprised of:

a display;

a billboard computer; and

a billboard antenna, said billboard computer is connected to and controls said display, said billboard antenna is connected to said billboard computer;

a main computer, said main computer is connected to a global computer network;

a communication system comprised of a communication server and a transmission antenna, said communication server is connected to said main computer, said transmission antenna is connected to said communication server; and

an advertisement stored as a digital file, said digital file is uploaded to said main computer through said global computer network, said main computer transfers said digital file to said communication system, said communication system transmits said digital file as a signal, said billboard antenna receives said signal, said billboard computer processes said signal, said billboard computer shows said signal on said display.

2. The apparatus described in claim 1, further comprising a satellite, said satellite receives said digital file from said communication server and transmits said digital file to said billboard antenna:

3. The apparatus described in claim 1, wherein said display is a flat panel electroluminescent display.

4. The apparatus described in claim 1, wherein said display is a liquid crystal display.

5. The apparatus described in claim 1, wherein said display is a light emitting diode display.

6. The apparatus described in claim 1, further comprising a web-site, said web-site is contained on said main computer, said web-site is accessible on said global computer network.

7. A method of transferring and displaying an advertisement, comprised of the steps of:

accessing a global computer network;

uploading an advertisement stored as a digital file through said global computer network to a main computer;

transferring said digital file from said main computer to a communication server;

transmitting said digital file on an antenna electrically connected to said communication server;

receiving said digital file at a billboard computer; and

displaying said digital on a display electrically connected to said billboard computer.

8. The method of claim 7, further comprised of the step of connecting to a web-site supported by said main computer.

9. A process of purchasing and displaying an advertisement, comprising the steps of:

accessing a global computer network;

connecting to a web-site;

purchasing an amount of advertising time;

uploading an advertisement stored as a digital file to a main computer connected to said web-site through said global computer network;

transmitting said advertisement to a billboard antenna;

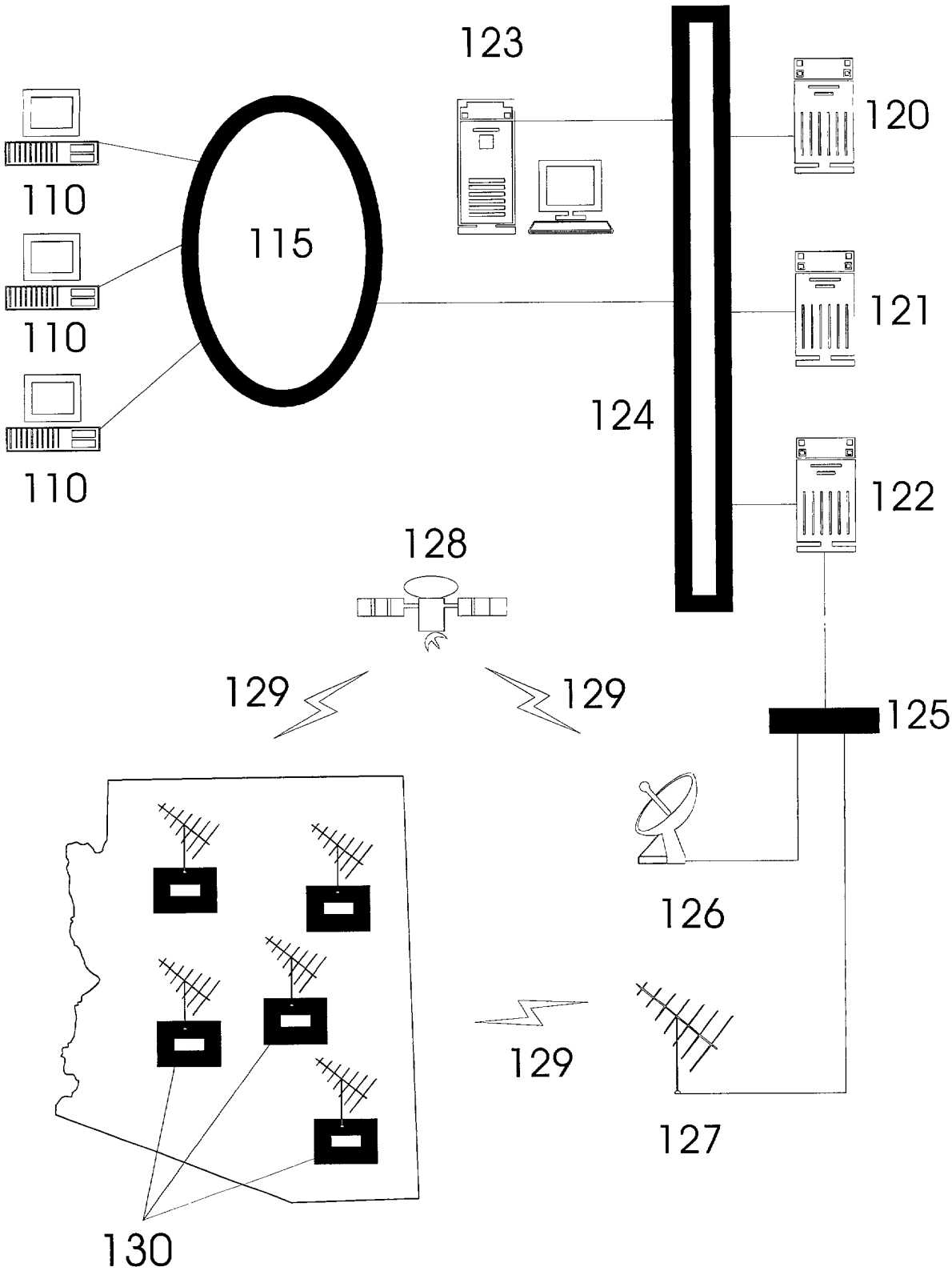
processing said advertisement on a billboard computer connected to said billboard antenna; and

displaying said advertisement on a display.

Abstract

A computer system manages a network of electronic advertising billboards through a wireless telecommunications system. The electronic billboard management system is comprised of a web-site supported by a global computer network. This web-site communicates with the network of electronic billboards via wireless telecommunications.

Once the purchaser has logged in to the website, he or she has access to the Purchase Advertising System, Upload Advertising System, the Account Support System, and the Advertising Design System. Using the Purchase Advertising System, a purchaser can select the number of electronic billboards, the geographic areas, and the times in which he or she wishes to advertise. The Advertising Design System is a graphics art computer program that can create a variety of still or animated images. Once a purchaser has created an advertisement, he will then access the Upload Advertising System to place his or her advertisements into action.


123
120
110
115
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128
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129
127
130

FIGURE 1

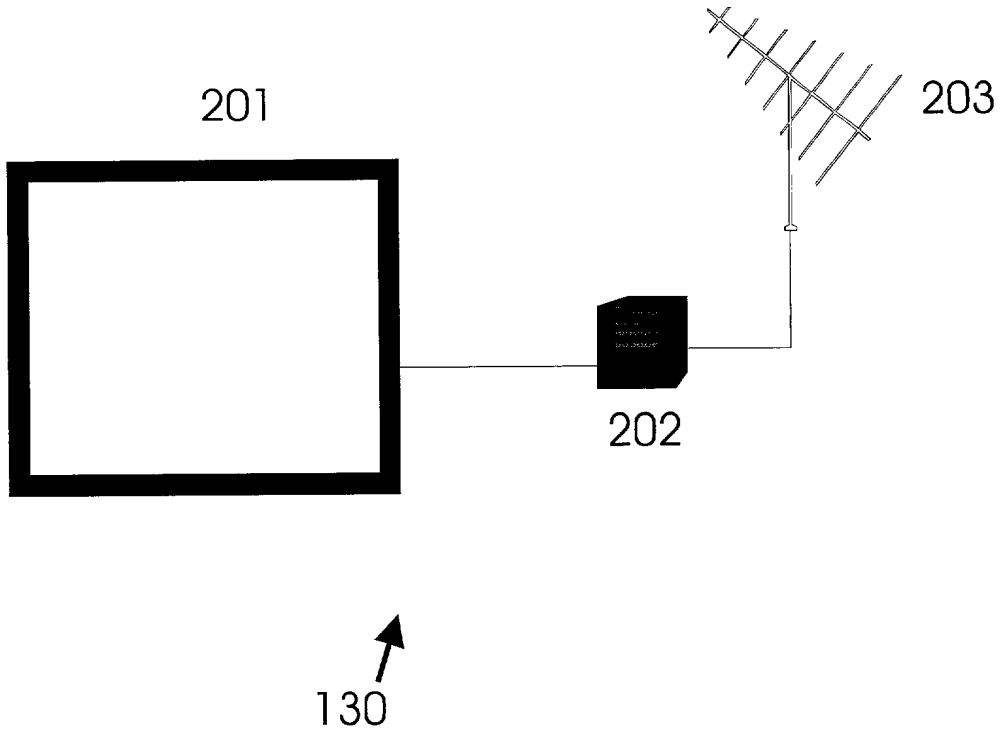

FIGURE 2

300

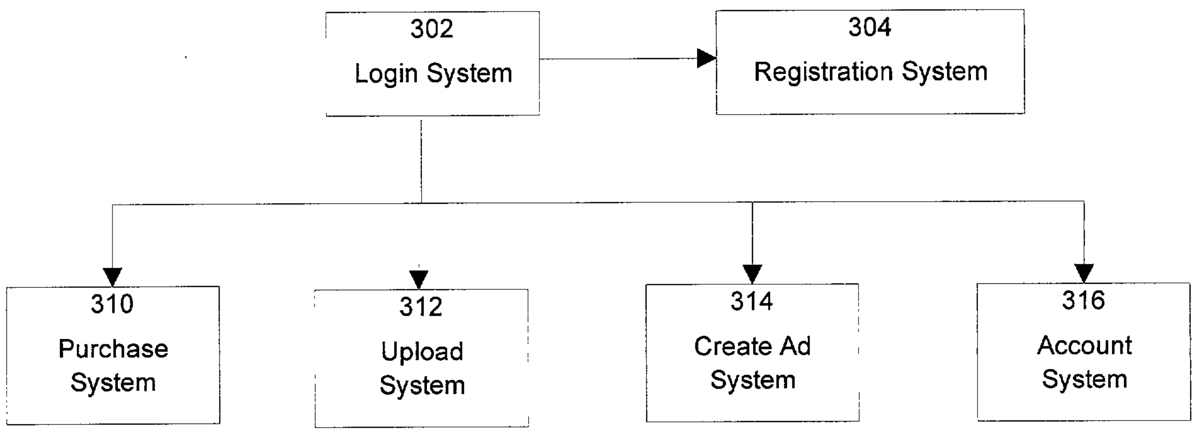
302
Login System
304
Registration System
310
Purchase System
312
Upload System
314
Create Ad System
316
Account System

Figure 3

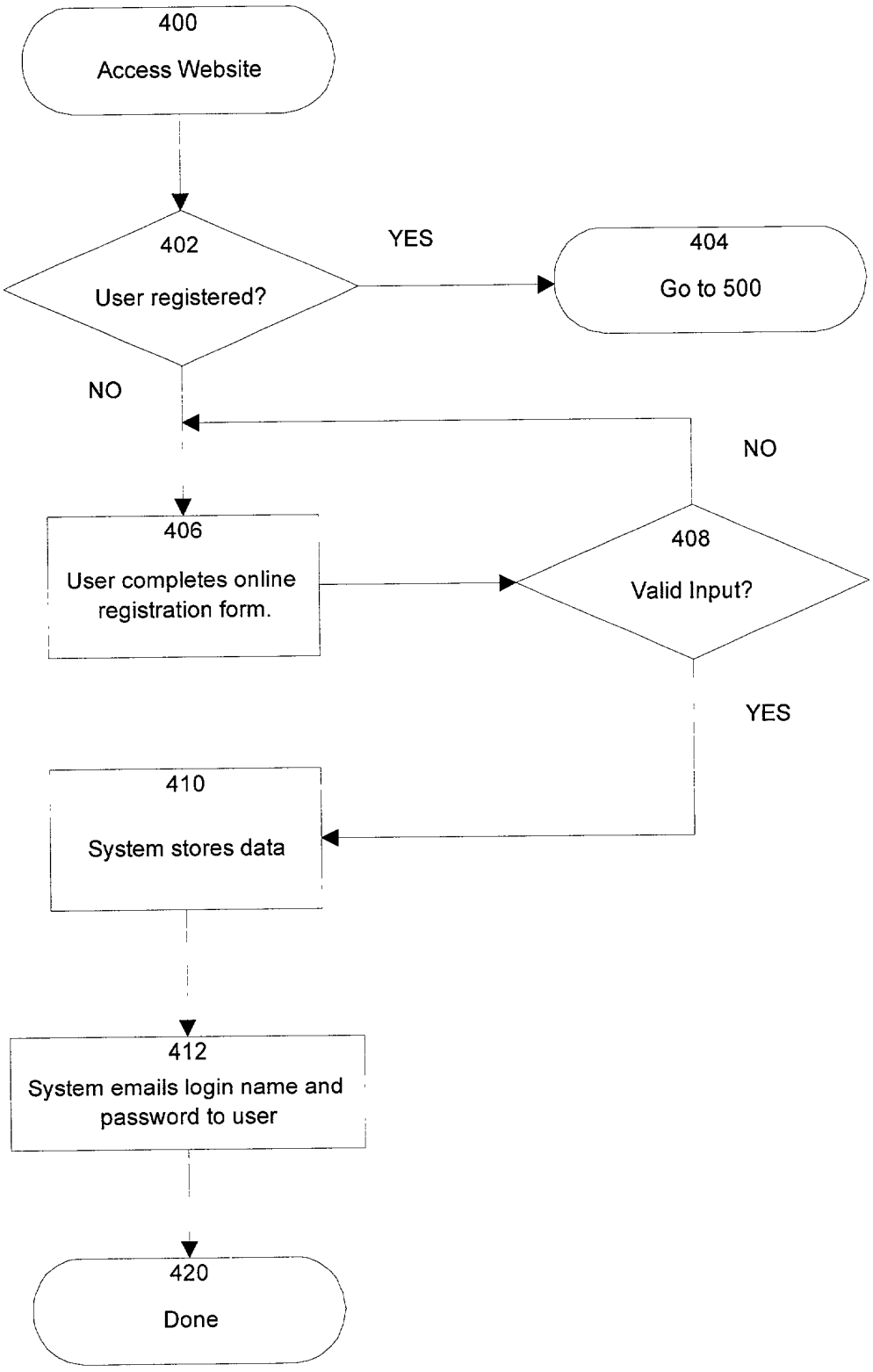
400
Access Website
402
User registered?
YES
404
Go to 500
NO
NO
406
User completes online registration form.
408
Valid Input?
YES
410
System stores data
412
System emails login name and password to user
420
Done

Figure 4

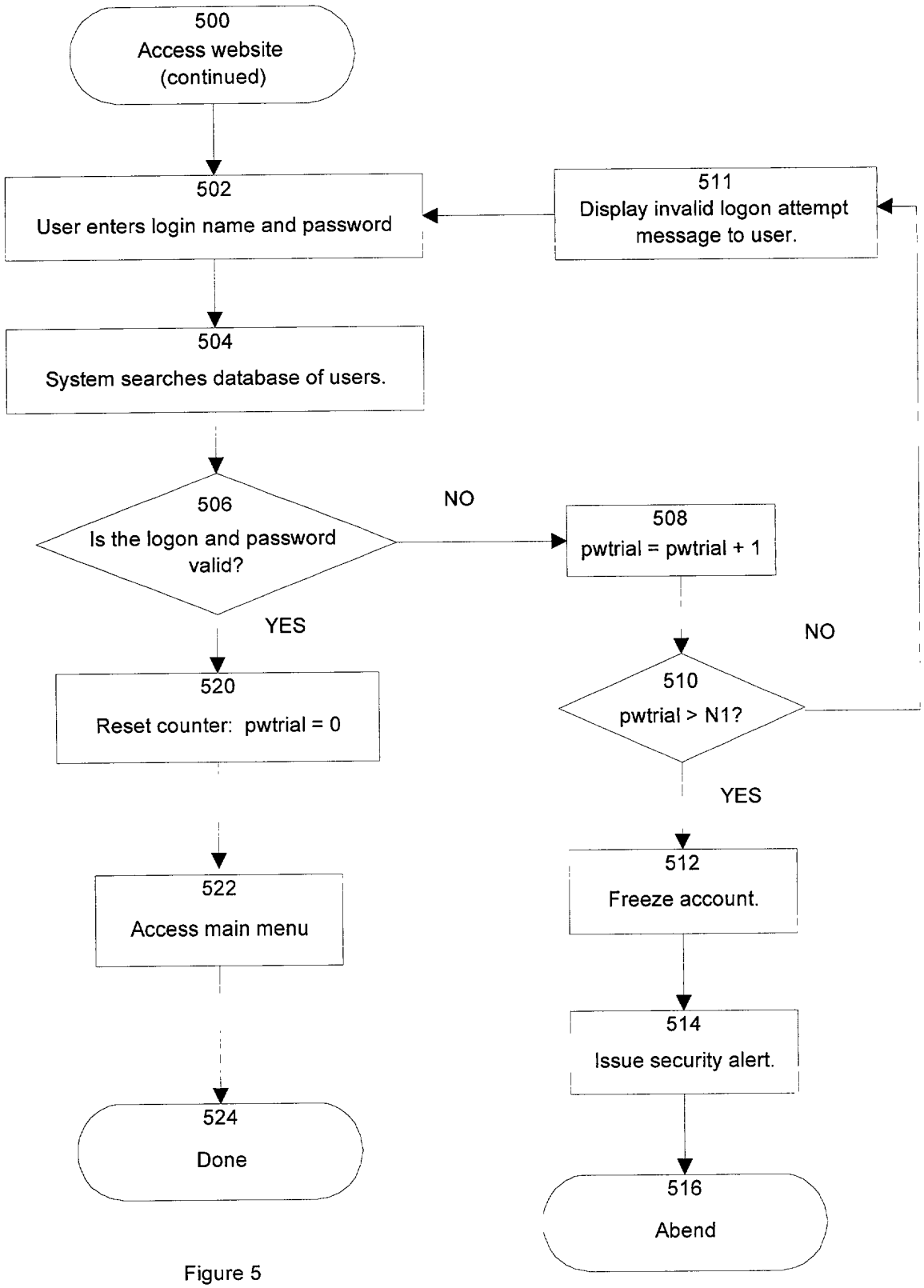
500
Access website
(continued)
502
User enters login name and password
511
Display invalid logon attempt message to user.
504
System searches database of users.
506
Is the logon and password valid?
NO
508
pwtrial = pwtrial + 1
YES
NO
520
Reset counter: pwtrial = 0
510
pwtrial > N1?
YES
522
Access main menu
512
Freeze account.
514
Issue security alert.
524
Done
516
Abend

Figure 5

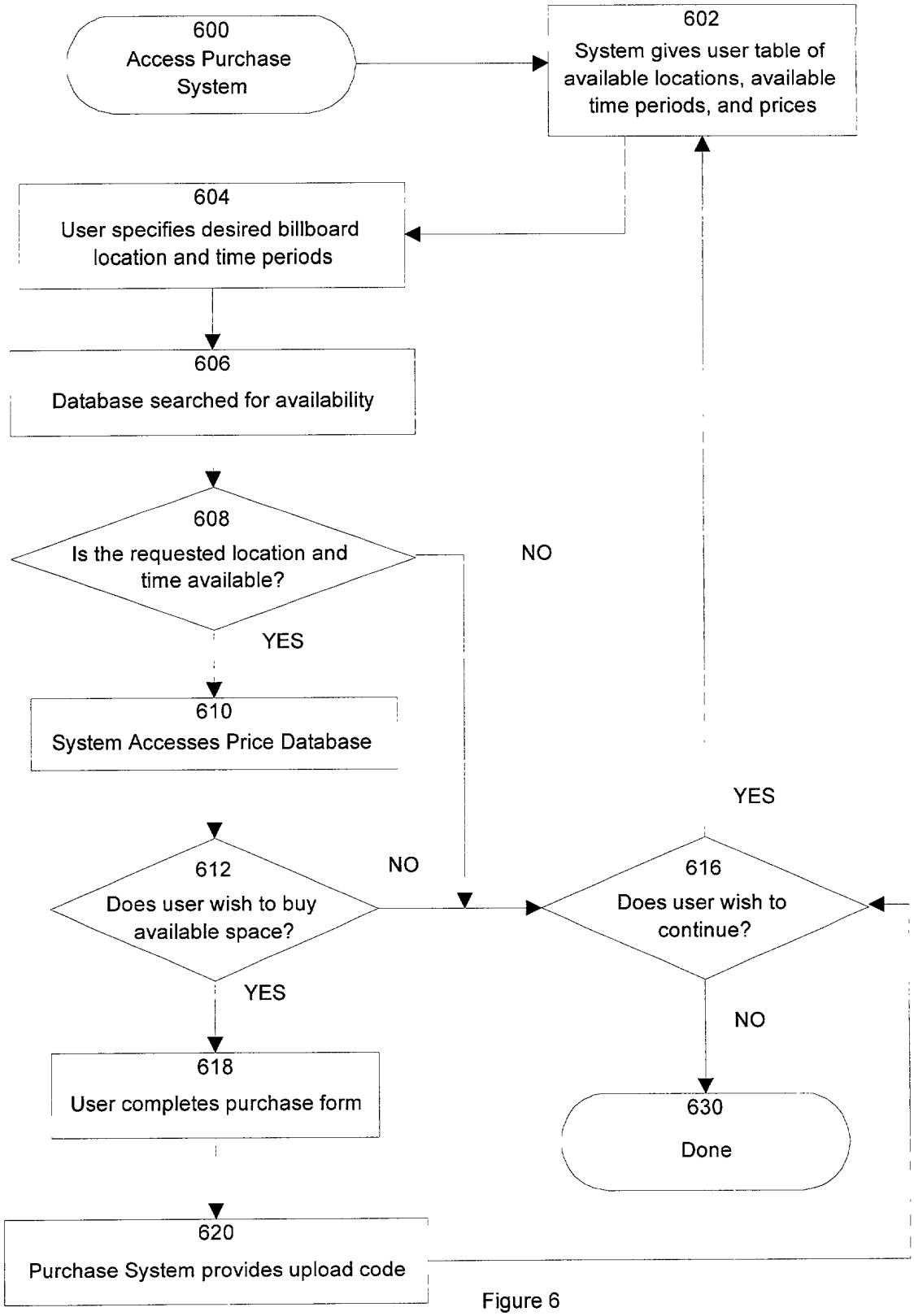
600
Access Purchase System
602
System gives user table of available locations, available time periods, and prices
604
User specifies desired billboard location and time periods
606
Database searched for availability
608
Is the requested location and time available?
NO
YES
610
System Accesses Price Database
612
Does user wish to buy available space?
NO
YES
616
Does user wish to continue?
YES
NO
618
User completes purchase form
630
Done
620
Purchase System provides upload code

Figure 6

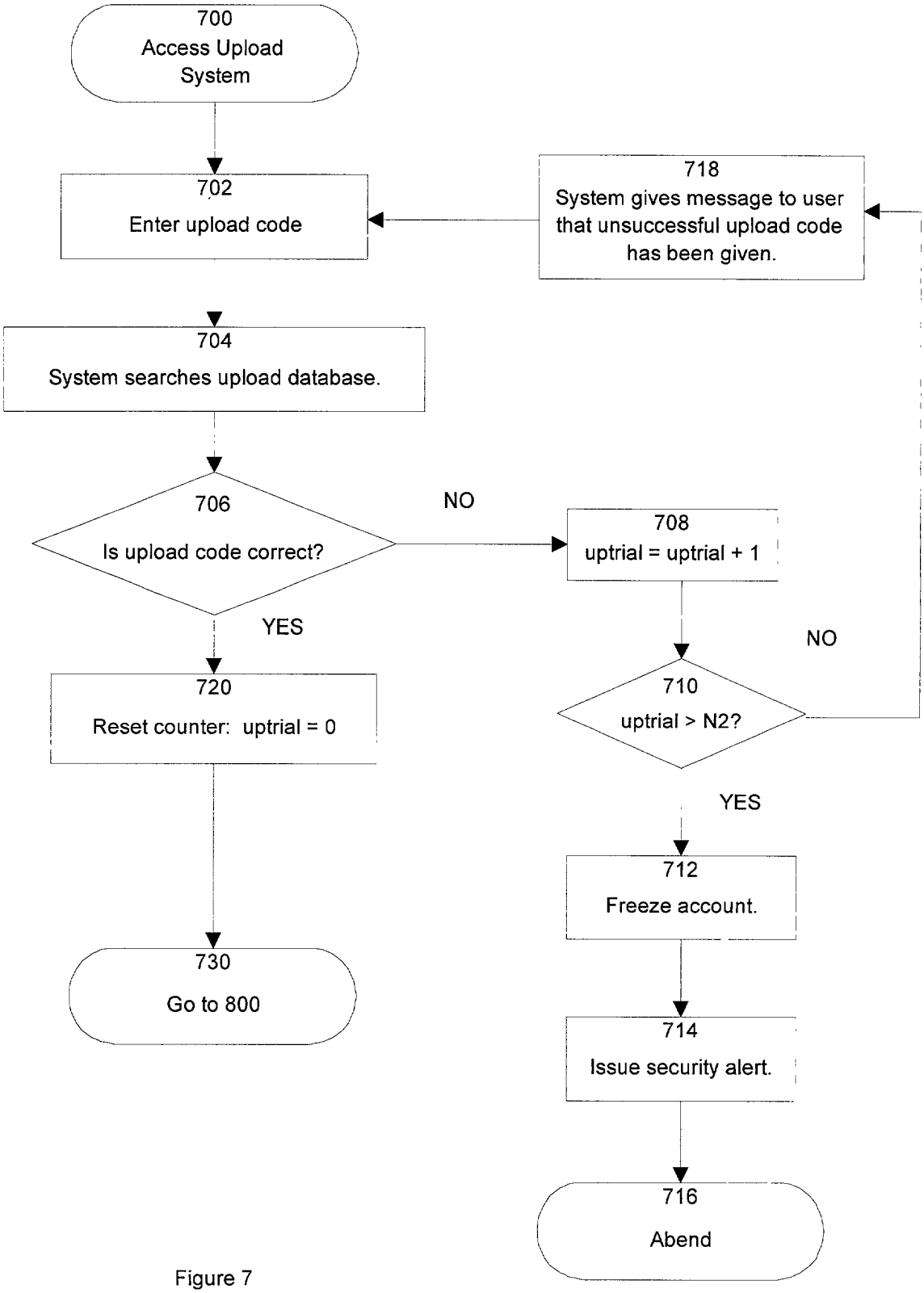
700
Access Upload System
702
Enter upload code
718
System gives message to user that unsuccessful upload code has been given.
704
System searches upload database.
706
Is upload code correct?
NO
708
uptrial = uptrial + 1
YES
NO
720
Reset counter: uptrial = 0
710
uptrial > N2?
YES
712
Freeze account.
730
Go to 800
714
Issue security alert.
716
Abend

Figure 7

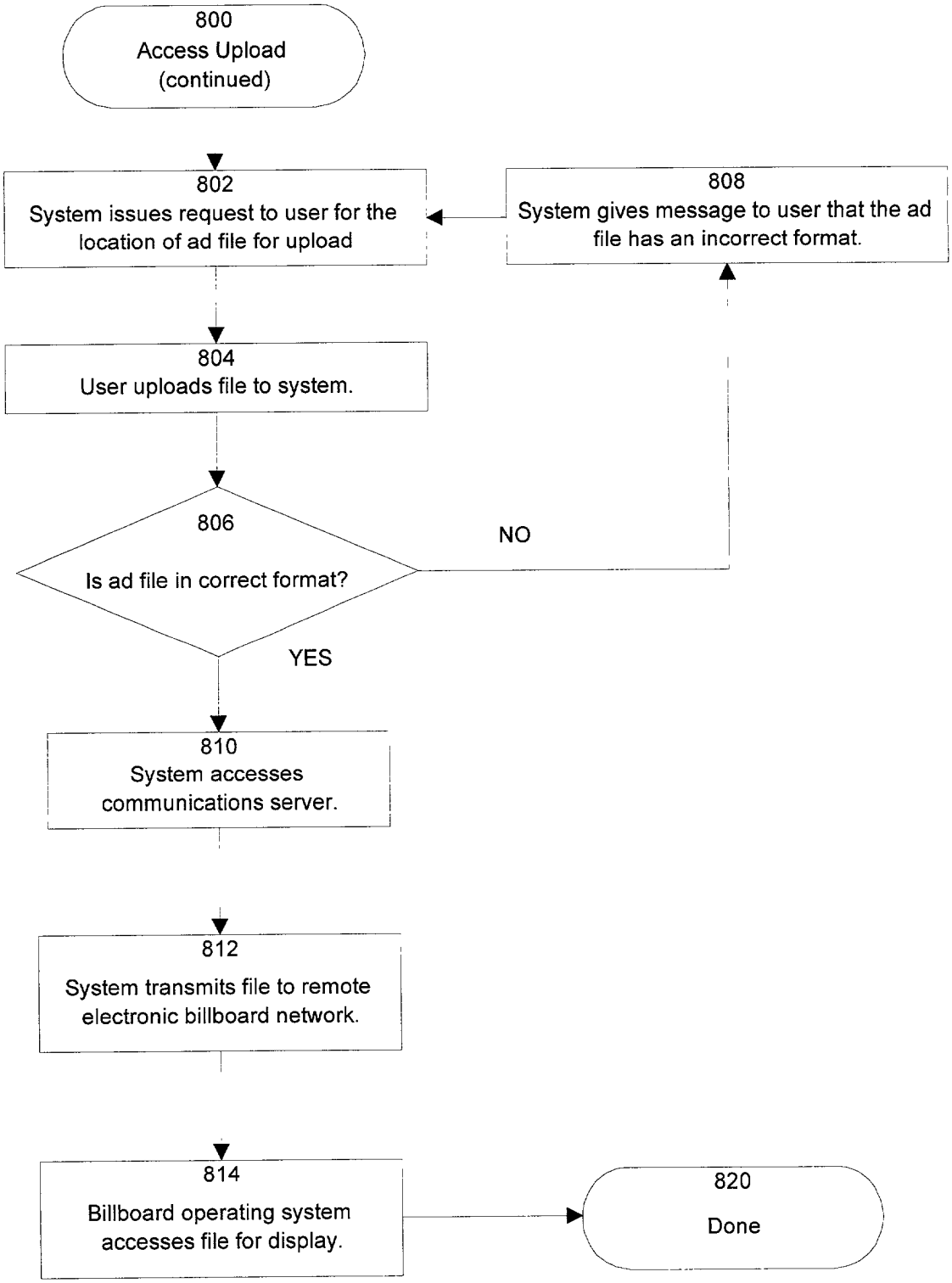
800
Access Upload
(continued)
802
System issues request to user for the location of ad file for upload
808
System gives message to user that the ad file has an incorrect format.
804
User uploads file to system.
806
Is ad file in correct format?
NO
YES
810
System accesses communications server.
812
System transmits file to remote electronic billboard network.
814
Billboard operating system accesses file for display.
820
Done

Figure 8

Figure 9 900

Name	901	John Longstreet
Mailing Address	902	5678 East Street
City	903	Seattle
State	904	Washington
Country and Zipcode	905	12345
Phone Number	906	(123) 456-7890
Fax Number	907	(123) 456-7891
Email Address	908	ineedabillboard@once.com
Company Name	909	International Database
Contact	910	Mary Chessnut
Username	911	Mchessnut
Password	912	JDAVIS
Internet address	913	www.database.com

I accept the legal agreement 940

Figure 10 1000

1014

					AM			PM		
Billboard No.	Street	City	State	ZIP	12	4	8	12	4	8
1000011	15 N. 8th Street	Tempe	AZ	85281	X	100	200	X	200	X
1000012	125 University Dr.	Tempe	AZ	85281	50	100	X	X	200	X
1000113	18 Camelback Rd.	Phoenix	AZ	85251	50	X	X	X	200	100
1005001	64 Camino Seco	Tucson	AZ	85711	50	X	X	X	200	100
2000021	995 Park Place	Denver	CO	80310	50	X	200	100	X	100
2000022	14444 Tree Rd.	Denver	CO	80310	50	X	200	100	X	100
8000701	1344 Circle Dr.	Seattle	WA	90711	X	X	200	100	200	100

1001 1010 1011 1012 1013

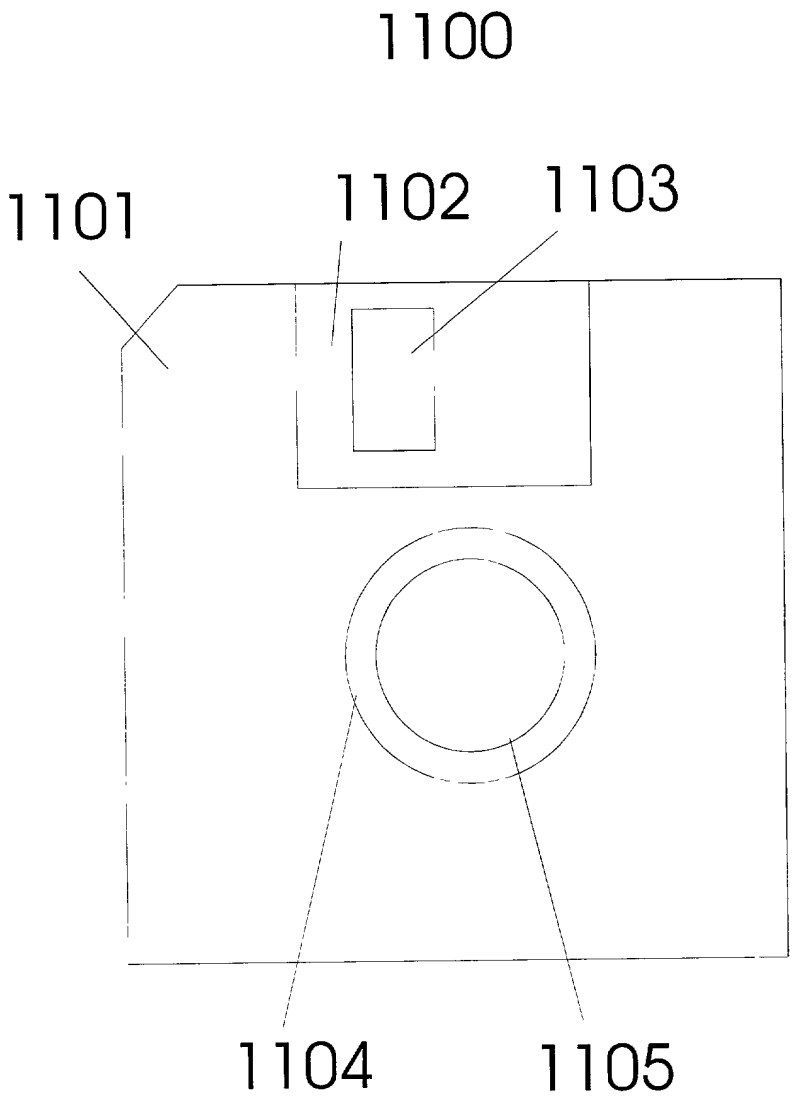

Figure 11

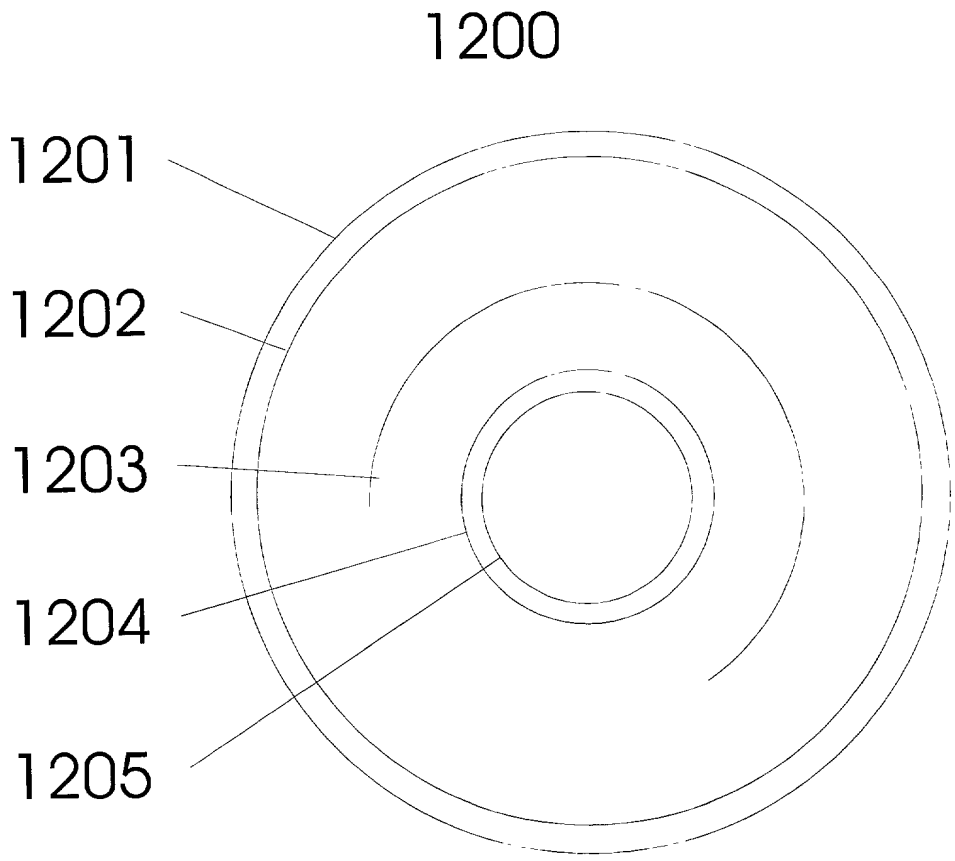

Figure 12

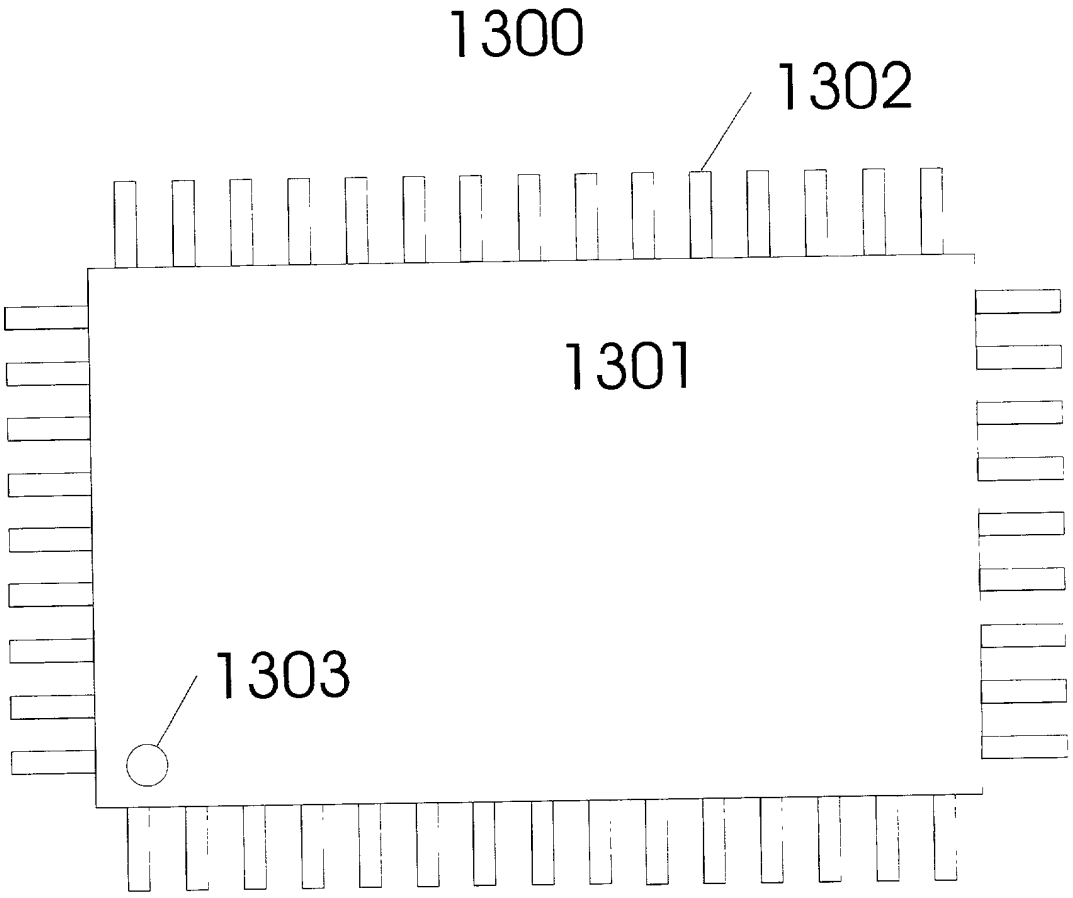

Figure 13

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION	**ATTORNEY DOCKET NO. 110/103**

As a below named inventor, I hereby declare that:

My residence/post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

An Internet Based System for Managing a Network of Electronic Advertising Billboards through a Wireless Telecommunications System

the specification of which is attached hereto unless the following box is checked:

( ) was filed on _____ as US Application Serial No. or PCT International Application Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE FILED	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			YES:___ NO.
			YES:___ NO:

Provisional Application

I hereby claim the benefit under Title 35, United States Code Section 119(e) of any United States provisional application(s) listed below·

APPLICATION SERIAL NUMBER	FILING DATE

U.S. Priority Claim

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION SERIAL NUMBER	FILING DATE	STATUS(patented/pending/abandoned)

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) listed below to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Tyson York Winarski, Reg. No. 41381

Send Correspondence to:	**Direct Telephone Calls To:**
Tyson York Winarski **The Winarski Firm, P.L.L.C.** **1265 East University Drive** **Suite 3015** **Tempe, Arizona 85281**	**Tyson York Winarski** **(480) 902-0645**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor: Tyson Winarski, Esq. **Citizenship:** American

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Post Office Address: Same

Inventor's Signature **Date** Sept 15, 2000

Full Name of Inventor: Jeff Myers

Citizenship: American

Residence: 5309 N. 34th Street, Phoenix, AZ USA 85018

Post Office Address: Same

Inventor's Signature

Date Sept 15, 2000